
AMENDMENTS TO THE CLAIMS

1-9. Previously canceled.

10. (Currently Amended) A system for monitoring the contaminated particle count in a chamber, comprising:

at least one laser disposed in the chamber, the at least one laser adapted to send a ray of light across the chamber, and wherein the at least one laser includes a first laser located at a first height with respect to a substrate and a second laser located at a second height with respect to the substrate, the second height being different from the first height;

at least one detector disposed in the chamber, the at least one detector comprising a first detector located at the first height and adapted to receive light from the first laser and a second detector at the second height adapted to receive light from the second laser, the at least one detector adapted to receive the ray of light and provide a signal corresponding to the intensity of the ray of light;

a measuring system operably coupled to the at least one detector, the measuring system adapted to receive the signal corresponding to the intensity of the ray of light and convert the signal to digital data; and

a processor operatively coupled to the measuring system, the processor adapted to receive the digital data from the measuring system and analyze the digital data ~~wherein the difference of the intensity of the ray of light from the at least one laser to when it is received by at least one detector is proportional to the particle count in the chamber~~ to determine a particulate count within the chamber, and the processor initiates dynamic cleaning of the chamber until the particulate count reaches an acceptable level.

11. (Original) The system of claim 10, wherein the measuring system applies in-situ laser scattering.

12. (Original) The system of claim 10, wherein the measuring system applies laser doppler anemometry.

13. (Original) The system of claim 11, wherein the measurement system applies interferometry.

14. (Original) The system of claim 10, wherein the measuring system applies spectrometry.

15. (Original) The system of claim 10, wherein the processor outputs the analyzed data to a display.

16. (Original) The system of claim 10, wherein the processor turns on an alarm if the contaminated particle count exceeds a predetermined level.

17. (Original) The system of claim 10, wherein the processor turns on an exhaust fan if the contaminated particle count exceeds a predetermined level, the exhaust fan communicating with the chamber to remove contaminant particles from the chamber.

18. (Original) The system of claim 17, wherein the exhaust fan is controlled by an exhaust controller.

19. (Original) The system of claim 10, further including at least one mirror disposed in the chamber, the at least one mirror adapted to reflect the ray of light received from the at least one light to the at least one detector

20. Previously canceled.

21. (Original) The system of claim 10, wherein the chamber is a cup.

22. (Currently Amended) A system for controlling the contaminated particle count in an aerosol found in a chamber during a photoresist coating and/or development process of a semiconductor, the system comprising:

at least one laser disposed in the chamber, the at least one laser adapted to send a ray of light across the chamber, and wherein the at least one laser includes a first laser located at a first height with respect to a substrate and a second laser located a second height with respect to a substrate, the second height being different from the first height;

at least one detector comprising a first detector located at the first height and adapted to receive light from the first laser and a second detector located at the second height adapted to receive light from the second laser disposed in the chamber, the at least one detector adapted to receive the ray of light and provide a signal corresponding to the intensity of the ray of light;

a measuring system operably coupled to the at least one detector, the measuring system adapted to receive the signal corresponding to the intensity of the ray of light and convert the signal to digital data; and

a processor operatively coupled to the measuring system, the processor adapted to receive the digital data from the measuring system and analyze the digital data ~~wherein the difference of the intensity of the ray of light from the at least one laser to when it is received by at least one detector is proportional to the particle count in the chamber~~ to determine a particulate count within the chamber, and the processor initiates dynamic cleaning of the chamber until the particulate count reaches an acceptable level;

an exhaust fan in communicative relationship with the chamber, the exhaust fan adapted to remove contaminated particles out of the chamber; and

a flow control valve controlling the exhausting level of the exhaust fan based on analyzed data received from the processor.

23. (Original) The system of claim 22, wherein the measuring system applies in-situ laser scattering.

24. (Original) The system of claim 22, wherein the measuring system applies laser doppler anemometry.

25. (Original) The system of claim 22, wherein the control valve is controlled by an exhaust controller.

26. (Original) The system of claim 22, further including at least one mirror disposed in the chamber, the at least one mirror adapted to reflect the ray of light received from the at least one light to the at least one detector.

27. Previously Canceled.

28. (Original) The system of claim 22, wherein the chamber is a cup.

29-38. Previously Canceled.
